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EXAMINER

MORRISON, THOMAS A

ART UNIT PAPER NUMBER

3653

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/700,806	Applicant(s) WONG ET AL.	
	Examiner Thomas A. Morrison	Art Unit 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-15 and 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, there is insufficient structural relationship recited between the input and output trays and any other elements of this claim, to understand how the input and output trays can be parallel in the different recited positions.

Claim 2 recites the limitation "the media output tray" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the storage position" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Also, it is unclear in claim 4, as to what is meant by the recited "without independent securement".

Regarding claim 5, there is insufficient structural relationship recited between the input and output trays in this claim, to understand how movement of the input tray causes movement of the output tray, as claimed.

Regarding claim 6, there is insufficient structural relationship recited between the input and output trays in this claim, to understand how the input tray cannot be in the second position unless the output tray is in the second position.

Regarding claim 7, there is insufficient structural relationship recited between the input and output trays in this claim, to understand how the output tray is moveable from the first position to the second position without movement of the input tray when the input tray is in the first position.

Regarding claim 9, it is unclear what is meant by the recited "the same plane". Is this plane different from the recited plane in claim 8?

Claim 10 recites the limitation "the plane" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 11, it is unclear which recited storage position is referred to in lines 8 and 9.

Regarding claim 12, it is unclear which recited processing position is referred to in line 4.

Also, there is insufficient structural relationship recited between the input and output trays in claim 12, to understand how the input tray plane and the output tray plane are parallel when the trays are in the processing position.

Claim 12 recites the limitation "the input tray plane" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the output tray plane" in line 3. There is insufficient antecedent basis for this limitation in the claim.

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Regarding claim 13, there is insufficient structural relationship recited in this claim, to understand how the input tray plane and the output tray plane are parallel when the trays are in the storage position.

Regarding claim 14, it is unclear which media processing position and which storage position is claimed, based on the two different processing positions and two different storage positions set forth in claim 11.

Claim 14 recites the limitation "the same distance" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "the device" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 recites the limitation "the same distance" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 21, there is insufficient structural relationship recited in this claim, to understand how the trap door pivots relative to the output tray when the output tray is moved to the second position.

Also, it is unclear from the claim language of claim 21, whether (1) the trap door pivots via the movement of the output tray or (2) the trap door can pivot when the output tray moves to the second position.

Regarding claim 22, there is insufficient structural relationship recited in this claim, to understand how the trap door pivots about a third axis.

Claim 22 recites the limitation "the first and second pivot axes" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 11-13 and 15, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Publication No. 5-77507. In particular, Japanese Publication No. 5-77507 discloses all of the limitations of claims 1-6, 11-13 and 15.

Regarding claim 1, Figs. 1-4 show a hardcopy device (1) for processing media, including

an input tray (8) pivotally movable between a first position (Fig. 3) and a second position (Fig. 1);

an output tray (24) pivotally movable between a first position (Fig. 3) and a second position (Fig. 1); wherein the input tray (8) and the output tray (24) are parallel in the first and second positions.

Regarding claim 2, Figs. 1 and 3 show that the input tray (8) is pivotally mounted to the hardcopy device (1) about a first pivot axis (8a) and the media output tray (24) is pivotally mounted to the hardcopy device (1) about a second pivot axis (22), and wherein the first pivot axis (8a) and the second pivot axis (22) are parallel but offset relative to one another.

Regarding claim 3, Figs. 1 and 2 show that a media travel axis (along top surface of paper into device) is transverse to the first and second pivot axes (8a and 22) and the first and second pivot axes (8a and 22) are offset relative to one another along the media travel axis.

Regarding claim 4, Fig. 3 shows that the input and output trays (8 and 24) are maintained in the storage position without independent securement.

Regarding claim 5, Figs. 1 and 3 show that movement of the input tray (8) from the first position (Fig. 3) to the second position (Fig. 1) causes movement of the output tray (24) from the first position (Fig. 3) to the second position (Fig. 1).

Regarding claim 6, Fig. shows that the input tray (8) cannot be in the second position (Fig. 1) unless the output tray (24) is in the second position (Fig. 1).

Regarding claim 11, Figs. 1-4 show a hardcopy device, including
an input tray (8) connected to the hardcopy device (1) and pivotally movable about a first pivot axis (8a) between a processing position (Fig. 1) and a storage position (Fig. 3);

an output tray (24) connected to the hardcopy device (1) above the input tray (8) and pivotally movable about a second pivot axis (22) between a processing position (Fig. 1) and a storage position (Fig. 3); and

wherein the first pivot axis (8a) is offset relative to the second pivot axis (22) so that when the input tray (8) and the output tray (24) are in the storage position (Fig. 3) the trays are held in the storage position.

Regarding claim 12, Fig. 1 shows that the input tray (8) defines an input tray plane and the output tray (24) defines an output tray plane, and wherein the input tray plane and the output tray plane are parallel when the trays are in the processing position (Fig. 1).

Regarding claim 13, Fig. 3 shows that the input tray plane and the output tray plane are parallel when the trays are in the storage position.

Regarding claim 15, Fig. 1 and 2 show transporting media through the device (1) along a media axis (along top surface of paper into device) and wherein the media axis is transverse to the first and second pivot axes (8a and 22), and wherein the first pivot axis (8a) is offset relative to the second pivot axis (22) along the media axis.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 7, 11 and 15, as best understood, are rejected under 35

U.S.C. 102(e) as being anticipated by U.S. Patent Publication No. 20030052956

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(Katsuyama). In particular, the Katsuyama Publication discloses all of the limitations of claims 1-4, 7, 11 and 15.

Regarding claim 1, Figs. 1-4 show a hardcopy device (1) for processing media, including

an input tray (20) pivotally movable between a first position (Fig. 2) and a second position (Fig. 3);

an output tray (23) pivotally movable between a first position (Fig. 2) and a second position (Fig. 3);

wherein the input tray (20) and the output tray (23) are parallel in the first and second positions. In particular, an upper surface of at least a portion of the input tray (20) is parallel to an upper surface of at least a portion of the output tray (23) in the first and second positions.

Regarding claim 2, Figs. 1-4 show that the input tray (20) is pivotally mounted to the hardcopy device (1) about a first pivot axis (22) and the media output tray (23) is pivotally mounted to the hardcopy device (1) about a second pivot axis (24), and wherein the first pivot axis (22) and the second pivot axis (24) are parallel but offset relative to one another.

Regarding claim 3, Figs. 1-4 show that a media travel axis is transverse to the first and second pivot axes (22 and 24) and the first and second pivot axes (22 and 24) are offset relative to one another along the media travel axis.

Regarding claim 4, Figs. 1-4 show that the input and output trays (20 and 23) are maintained in the storage position (Fig. 3) without independent securement.

Regarding claim 7, Fig. 4 shows that the output tray (23) is not connected to the input tray (20). As such, the output tray can be moved from the first position (Fig. 2) to the second position (Fig. 3) without movement of the input tray (20) when the input tray (20) is in the first position (Fig. 2).

Regarding claim 11, Figs. 1-4 show a hardcopy device (1), including
an input tray (20) connected to the hardcopy device (1) and pivotally movable about a first pivot axis (22) between a processing position (Fig. 2) and a storage position (Fig. 3);

an output tray (23) connected to the hardcopy device (1) above the input tray (20) and pivotally movable about a second pivot axis (24) between a processing position (Fig. 2) and a storage position (Fig. 3); and wherein the first pivot axis (22) is offset relative to the second pivot axis (24) so that when the input tray (20) and the output tray (23) are in the storage position (Fig. 3) the trays are held in the storage position (Fig. 3).

Regarding claim 15, Figs. 1-4 show a configuration for transporting media through the device (1) along a media axis and wherein the media axis is transverse to the first and second pivot axes (22 and 24), and wherein the first pivot axis (22) is offset relative to the second pivot axis (24) along the media axis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10, 14 and 16-20, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Publication No. 5-77507.

Regarding claims 10 and 14, Figs. 1 and 3 of Japanese Publication No. 5-77507 show that the output tray (24) includes a forward edge (near 24) forward of the second pivot axis (22), but Figs. 1 and 3 do not specifically show that the forward edge (near 24) is spaced apart from the plane defined by the input tray (8) by a distance that is the same when the output tray is in the (first position/media processing position) or the (second position/storage position). However, absent some showing of criticality, this spacing relationship is merely matter of design choice within the skill of one of ordinary skill in the art.

Regarding claim 16, Figs. 1-4 of Japanese Publication No. 5-77507 show that in a hardcopy device (1) having an external media input tray (8) and an external media output tray (24) wherein the hardcopy device (1) with the input tray (8) and output tray (24) in a media processing position (Fig. 1) occupies a space having a first size, the improvement including

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input and output tray mounting means (including 8a and 22) for allowing the input tray (8) and output tray (24) to be moved from the media processing position (Fig. 1) to a storage position (Fig. 3) in which the space occupied by the hardcopy device (1) is less than the first size. Also, the English Abstract explains that this device promotes the miniaturization and thickness reduction of a recording device. However, the English Abstract for this Japanese Publication does not specifically state that the space occupied by the hardcopy device is between 15% and 45% less than the first size. The specific dimensional relationship of the device, before and after opening the input and output trays, is merely a matter of design choice that would be obvious to one of ordinary skill in the art.

Likewise, with regard to claim 17, it is an obvious matter of design choice to make the space occupied by the hardcopy device in the storage position (Fig. 3) about 30% less than the first size.

Regarding claim 18, Figs. 1 and 3 show that the input and output tray mounting means (including 8a and 22) further includes the input tray (8) pivotally movable about a first pivot axis (8a) between the media processing position (Fig. 1) and the storage position (Fig. 3), and the output tray (24) pivotally movable about a second pivot axis (22) between the media processing position (Fig. 1) and the storage position (Fig. 3), wherein the first pivot axis (8a) is offset relative to the second pivot axis (22).

Regarding claim 19, Fig. 1 shows that the input tray (8) defines an input tray plane and the output tray (24) defines an output tray plane, and wherein the input tray

plane and the output tray plane are substantially parallel when the trays are in the media processing position.

Regarding claim 20, Figs. 1 and 3 of Japanese Publication No. 5-77507 show that the input tray (8) defines an input tray plane when in a media processing position (Fig. 1) and the output tray (24) includes a forward edge (near 24) that is spaced apart from the input tray (8) plane, but Figs. 1 and 3 do not specifically show that the forward edge (near 24) is spaced apart from the input tray plane by the same distance when the output tray is in the media processing position or the storage position. However, absent some showing of criticality, this spacing relationship is merely matter of design choice within the skill of one of ordinary skill in the art.

5. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 20030052956 (Katsuyama) as applied to claim 1 above, and further in view of U.S. Patent No. 6,113,093 (Morinaga et al.). Regarding claim 8, Figs. 2 and 3 of the Katsuyama Publication show that when the output tray (23) is in the second position (Fig. 3), a portion of the trap door labeled "27" lies in a plane that passes through a portion of the output tray (23) labeled "23a". However, the plane passing through the portion of the trap door labeled "27" is not parallel to a plane that passes through a portion of the output tray (23) that is located above the numeral "3a" in Fig. 3. In other words, at least a portion of the trap door (27) lies in a plane that is not parallel to a plane that passes through a portion of the output tray (23).

Regarding claim 9, Fig. 2 shows that a portion of the output tray (23) labeled "23" and a portion of the trap door (27) labeled "27" lie in the same plane when the output tray (23) is in the first position (Fig. 2).

Also, with regard to claims 8 and 9, the Katsuyama Publication discloses that the trap door (27) is connected to the output tray (23) to extend the length of the output tray (23) and accommodate long length sheets, but this publication does not disclose that the trap door (27) is pivotally connected to the output tray (23).

The Morinaga et al. patent shows that it is well known to provide a trap door (33) that is pivotally connected to a tray (3) in order to extend the length of a tray (3) and accommodate long length sheets. It would have been obvious to one of ordinary skill in the art at the time of the invention, to pivotally connect the trap door structure of the Katsuyama Publication to the output tray (23) of the Katsuyama Publication as taught by Morinaga et al., since such a modification merely involves providing one well known mounting structure in the place of another well known mounting structure that performs the same extending function.

6. Claims 21-22, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 20030052956 (Katsuyama) in view of U.S. Patent No. 6,113,093 (Morinaga et al.). The Katsuyama Publication discloses most of the limitations of claims 21 and 22, but does not specifically show a trap door that is pivotally connected.

Regarding claims 21 and 22, Figs. 1-4 of the Katsuyama Publication show a hardcopy device (1) configured for transporting media along a media travel axis, including

an input tray (20) pivotally movable about a first axis (22) between a first position (Fig. 2) and a second position (Fig. 3);

an output tray (23) pivotally movable about a second axis (24) between a first position (Fig. 2) and a second position (Fig. 3),

wherein the media travel axis is transverse to the first and second pivot axes (22 and 24). The Katsuyama Publication also discloses a trap door (27) connected to the output tray (23) to accommodate longer length sheets, but Figs. 1-4 do not specifically show that the trap door (27) is pivotally connected to the output tray (23).

The Morinaga et al. patent shows that it is well known to provide a trap door (33) that is pivotally connected to a tray (3) in order to extend the length of the tray (3) and accommodate long length sheets. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to pivotally connect the trap door structure (27) of the Katsuyama Publication to the output tray (23) of the Katsuyama Publication as taught by Morinaga et al., since such a modification merely involves providing one well known mounting structure in place of another well known mounting structure that performs the same extending function. Providing a pivot structure according to the teachings of Morinaga et al., in the environment of the Katsuyama Publication, will result in a third axis that is parallel to the first and second axes (22 and 24) of the Katsuyama Publication. With regard to the location of the third axis between the first and second

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axes, it is noted that providing the third axis in a convenient location is merely a matter of design choice, absent a showing of criticality for such third axis location.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on (571) 272-6944. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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